

HEUCHERA MICRANTHA VAR. *MACROPETALA*
(SAXIFRAGACEAE), A NEW VARIETY

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ABSTRACT. This newly described variety of *Heuchera micrantha* is characterized by the presence of widely ovate petals, a cyathiform calyx, and in general, a taller inflorescence than the other varieties of *H. micrantha*. Clearly different from the other varieties of *H. micrantha* in the shape of the flower, in the greater width of the petal, and in having fewer flowers per lateral branch of the inflorescence, it appears to be distinct at the varietal level. The cyathiform calyx is not found in any other *H. micrantha* variety. The exerted stigmas and stamens, the size of the flower, the leaf shape, and indumentum are characters held in common with the other varieties of *H. micrantha*, which place this taxon within our circumscription of the species.

Key Words: *Heuchera micrantha* var. *macropetala*, *Micranthae*, var. nov., cyathiform calyx

In their monograph on *Heuchera*, Rosendahl, Butters, and Lakela (1936) treated *H. micrantha* as a polymorphic species with five varieties and two forms. From locations in the Siskiyou (Oregon and California) and Klamath (California) Mountains they reported the existence of a number of specimens which fit no varietal description and which they identified as transitional forms. Since the publication of their work, specimens from the same populations within these locations collected in different years have been identified as *H. micrantha* var. *micrantha*, *H. micrantha* var. *pacifica*, *H. micrantha* var. *erubescens*, and *H. pilosissima*. Some of these populations share a stable set of morphological characteristics and, in a recent revision of *Micranthae* and *Pilosissimae* of *Heuchera* in the Saxifragaceae (Shipes 1988), a new variety of *Heuchera micrantha* has been recognized in this region of northern California and southern Oregon. For clarity and bibliographic convenience, the new variety is validated, described, and briefly explained here.

Heuchera micrantha Dougl. ex Lindl. var. **macropetala** Shipes & Wells, *var. nov.* TYPE: Oregon, Curry Co., Big Craggy, 12 Jun 1933, *L. Leach s.n.* (HOLOTYPE: ORE!; ISOTYPE: OSU!)

Calycibus cyathiformibus usque ad non profunde turbinatis; petalis late ovatis, vix unguiculatis, cum tribus typis venationis: (1) una vena principalis cum 2–4 venis lateralibus; (2) una vena media; (3) venatio imperfecta suprabasalaris acrodroma (3–5).

Leaf blade semi-orbicular to pentagonal, at least 3 leaf forms on each plant: (1) blade semi-orbicular with 7 very shallow lobes, each lobe with lateral lobes; (2) blade pentagonal, the length equal to the width, with 5–7 lobes, each lobe with lateral lobes; (3) blade pentagonal, the length greater than the width, with 7 lobes, blade 3.5–7.0 cm from base to apex, 2.4–7.0 cm wide, main lobes somewhat spreading with crenate sublobes. In all three forms the lobe apices and teeth are cuspidate to acute apiculate (1.0 mm vein extension); leaf bases cordate; margins sparingly ciliate; upper leaf surface glabrous to sparsely strigose; lower leaf surface sparsely villous to strigose on veins; petioles 4.2–15.0 cm long, puberulent, sometimes sparsely villous. Inflorescences 6.0–57.0 cm tall, somewhat lax, 2.3–11.0 cm broad, lateral axes with short, even puberulence, sometimes sparingly villous; peduncle bracts scarious, lanceolate to linear, occasionally large, similar to basal leaves in shape but never as large; bracts subtending floral branches herbaceous, margins divided, divisions with aristate tips. Calyces cyathiform (shaped like a small, shallow bowl) to shallowly turbinate, 1.0–3.4 mm long and 1.3–3.6 mm wide at anthesis; free hypanthia 1.1 mm long; sepal lobes usually white with green or red tips, rounded, 0.5–1.5 mm long. Petals white, widely ovate, barely clawed, with three types of venation: (1) one main vein and 2–4 almost parallel lateral veins; (2) single mid-vein; (3) 3–5 secondary veins branching supra-basally from one main vein; 1.5–3.5 mm long, 0.4–1.4 mm wide with puberulent patches in the upper 1/3 of the blade; margins entire. Stamens at anthesis exerted 1.0–3.2 mm beyond calyx. Styles at anthesis exerted 0.1–2.5 mm from calyx, length of style and portion of the ovary above the hypanthium at anthesis 1.2–3.9 mm. Capsules exerted, 2.5–5.0 mm long excluding persistent styles; seeds dark brown, echinate, 0.7 mm long, 0.4 mm wide. PHENOLOGY. Flowering from middle of April through middle of June.

HABITAT. Mixed evergreen forest on either limestone or serpentine base, in the Klamath Mountains of California and the Siskiyou Mountains of California and Oregon. Latitude 40–43°N.

This newly described variety is characterized by the presence of widely ovate petals, a cyathiform calyx, and in general, a taller inflorescence than the other varieties of *Heuchera micrantha*. Based on floral, fruit, and inflorescence characters, it appears to be distinct at the varietal level. It is clearly distinct from the other varieties of *H. micrantha* in the shape of the flower, in the greater petal width, and in having fewer flowers per lateral branch of the inflorescence. The cyathiform calyx is not found in any other *H. micrantha* variety. However, the exserted stigmas and stamens, the size of the flower, the leaf shape, and indumentum are characters held in common with the other varieties of *H. micrantha*, which place this taxon within our circumscription of the species.

REPRESENTATIVE SPECIMENS. OREGON: Curry Co., Bald Mt. Creek, NW exposure, McGribble Forest Service Camp, T33S, R24W, Sect. 20, *Detling 5880* (ORE); Rogue River Canyon, rock ledges along Rogue River W of Brushy Bar, *Baker 3832* (JEPS, UC); Squirrel Camp, *Leach 1889* (ORE, OSC); Big Craggy, 6/12/33, *Leach s.n.* (ORE, OSU); Forest Service Rd. #333 (Powers-Agness Rd.), 3 mi N of the jct with #330, Agness vicinity, *Crosby 1224* (ORE); Siskiyou National Forest, 16–18 mi W of jct of Hwy. 199 with Forest Service Rd. 3807 on 3807 (Rd. to Kalmiopsis Wilderness), *Denton 2350* (OSC, UW); Josephine Co., Mouse Creek on Rogue River, 2.3 mi upstream from bridge at mouth of Graves Creek, *Crosby 1154* (DH, ORE, OSC); Graves Creek Rd., 1 mi E of jct of Graves Creek with Rogue River, T33S; R7W, Sect. 31, *Crosby 1153* (OSC); Siskiyou National Forest, 20–23 mi NW of Selma on the Illinois River Rd. or 8–11 mi N of jct with Rt. 374 on Forest Service Rd. 3504, *Denton 2475* (UW); Lane Co., Ollalie Trail in Willamette National Forest, T16S, R5E, *Ireland 1117* (ORE); CALIFORNIA: Humboldt Co., Horse Mt., T6N, R4E, Sect. 34, *Klipfel 676, 680* (HSC); Little Horse Linto Creek below Grizzly Camp, *Tracy 18976* (UC); Willow Creek, E fork, T6N, R4E, Sect. 15, 34 mi from US 101 along State Rt. 299, *Reed 66* (HSC); Shasta Co., Redding, 25 mi E, *Hitchcock 6481* (POM, UW); Siskiyou Co., State Rt. 299, 0.2 mi E of jct with Hennessey Rd., 4/30/72, *Sawyer, s.n.* (HSC); rd. between Forks of Salmon & Somes Bar, *Smith 8695* (HSC); Kangaroo Mt. above Toehead Lake, T18N, R12W, Sect. 16, *Smith, Sawyer, & O'Mear 5675* (HSC); Salmon River, S fork of road 4 mi E of Cecilville, *Irwin 44501* (HSC); Salmon River, 10 mi SE T10N, R6E, Sect. 30, *Miller 10108* (HSC, RSA); Slater Butte & Indian Creek, Klamath National Forest, *Detling 6098* (ORE); Trinity Co., Burnt Ranch, 8 mi W on Underwood Mt. Rd., *Spellenberg 454* (HSC); Canyon Creek above McKay Camp, *Ferlatte 65* (HSC, RSA); Gray Falls, trails above the Trinity River, Humboldt Meridian, T6N, R7W, Sect. 34, *Smith 8098* (HSC, RSA); Gray Falls, New River Trail, T6N, R6E, Sect. 35, *Lundquist 58* (HSC);

Gray Falls Campground above the Trinity River, *DeTomaso 924* (HSC); Hobo Gulch Camp and vicinity (18 mi NW of Weaverville, along N fork of trail at the washout below Struce Cabin), *Carter 546* (CAS); Ironside Mt. Quad. T6N, R6E, Sect. 35, *Sawyer 2499* (HSC), *Sawyer 2601* (HSC); White's Bar, above State Rt. 299, *Sawyer & Cole* (HSC).

LITERATURE CITED

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- SHIPES, B. G. 1988. A systematic survey of subsections *Micranthae* and *Pilosissimae* section *Heuchera* in the genus *Heuchera* (Saxifragaceae). Ph.D. dissertation, The George Washington University, Washington, DC.